DOCUMENT RESUME

ED 467 941 IR 021 461

AUTHOR	Halliday, Jackie
TITLE	The Graduate Diploma in Education Technology: The Development of an Online Programme.
PUB DATE	2001-12-00
NOTE	8p.; In: Meeting at the Crossroads. Proceedings of the Annual Conference of the Australasian Society for Computers in Learning in Tertiary Education (ASCILITE 2001) (18th, Melbourne, Australia, December 9-12, 2001); see IR 021 433.
PUB TYPE	Reports - Descriptive (141) -- Speeches/Meeting Papers (150)
EDRS PRICE	EDRS Price MF01 Plus Postage. PC Not Available from EDRS
DESCRIPTORS	Computer Software; Computer Uses in Education; *Distance Education; Educational Environment; Educational Technology; Elementary Secondary Education; Foreign Countries; Higher Education; *Instructional Development; Learning Theories; *Online Courses; Open Education; Program Development; Teacher Education; *Technology Integration; *Web Based Instruction
IDENTIFIERS	New Zealand; Technological Change

ABSTRACT

The Graduate Diploma in Education Technology (GDipEdTech) was developed at the UNITEC Institute of Technology (New Zealand) in 1993 as an open and distance program to meet the needs of teachers in the primary, secondary, and tertiary sectors. The program aims to integrate the use of new and emerging technologies into their classroom programs. It has gone through a number of developments in order to keep pace with changing technologies. From being a largely print-based program, augmented by First Class communication software, it has moved to one that has been fully operational online since 1997. It was first developed using HTML. At the end of 1999 the program was transferred into a commercial online course shell, Blackboard. This development has meant a challenge for the program leader and lecturers to present a program that takes account of contemporary learning theories, adapting them to an online learning environment. They must keep abreast of parallel developments in both World Wide Web-based technologies and online teaching techniques. (Contains 14 references.) (Author/MES)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 467 941

THE GRADUATE DIPLOMA IN EDUCATION TECHNOLOGY: THE DEVELOPMENT OF AN ONLINE PROGRAMME

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

H. Carter

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

Jackie Halliday
School of Education
UNITEC Institute of Technology, New Zealand
jhalliday@unitec.ac.nz

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Abstract

The Graduate Diploma in Education Technology (GDipEdTech) was developed in 1993 as an open and distance programme to meet the needs of teachers in the primary, secondary and tertiary sectors. The programme aims to integrate the use of new and emerging technologies into their classroom programmes. It has gone through a number of developments in order to keep pace with changing technologies. From being a largely print-based programme, augmented by First Class communication software, it has moved to one that has been fully operational online since 1997. It was first developed using HTML. At the end of 1999 the programme was transferred into a commercial online course shell, Blackboard. This development has meant a challenge for the Programme Leader and lecturers to present a programme that takes account of contemporary learning theories, adapting them to an online learning environment. They must keep abreast of parallel developments in both web-based technologies and online teaching techniques.

Keywords

Blackboard, education technology, online learning, schools, professional development, web course tools

Introduction

The Graduate Diploma in Education Technology was developed in 1993 as a two year part time, open and distance programme designed for teachers at primary, secondary and tertiary level. The programme aims to develop and encourage the use of new and emerging technologies in the provision of student-centred learning. The programme comprises seven courses covering the areas of learning theory, instructional design, ethics, equity, role of the teacher, applications, multimedia, telecommunications and managing education technology. The way in which the programme is taught is designed to model good teaching practice using a range of technologies. The challenge for the Programme Leader has been to offer an innovative professional development programme for teachers that takes account of contemporary learning theories, uses new technologies and sound online teaching techniques. Strategies to develop effective online learners have also been incorporated into the programme. This paper describes the development process that the programme has undergone from its first days using a communication package to augment print-based material, to a fully online programme using web-based course tool software.

Online Learning

In considering current learning theories, St George (1997) advocates that effective learners are motivated, knowledgeable, strategic, reflective and socially interactive. Interactivity on the internet is one way of promoting active learners. Learning activities are devised in such a way as to encourage and to expect learners to interact with a) the course material, b) the lecturer and c) other

IR021461

BEST COPY AVAILABLE

participants, in order to process and reflect on the information in order to create new knowledge. Crook (1996) argues that the process of social interaction is very important in order to support cognitive change. The inclusion of metacognitive activities is essential to enable learners to reflect on their own practice and to assist in the transfer process, to relate new knowledge to their own situation. Lock (1996) describes how humans are at a stage where we can use new forms of telecommunications, especially the internet, to create new forms of community with the new technologies mediating our activities. Hence, this new technology to mediate the process of learning. The computer as a means of communication is the actual mediator. The learner is empowered to think effectively in new situations.

When developing an online course for teachers one must be aware of the needs of teachers as adult learners. For teachers to participate in professional development programmes successfully, whether face-to-face, or online, several conditions must be present. These include: the establishment of a learning community (Pallof & Pratt, 1999), the recognition of the teacher as a person (Fullan, 1991; Joyce & Showers, 1995), the use of collaborative strategies where teachers can learn, work and share together (Brody & Davidson, 1998), the active involvement of school managers (Leithwood, 1992), and the time and opportunity to practise, discuss, reflect, support and challenge each other (Brody & Davidson, 1998).

The challenge is to provide a tertiary programme that helps teachers learn **about** the technology by **using** it to learn, in an authentic context. In other words they learn to use the technology by using technology to learn. At the same time, the programme models activities that they can transfer to their own classroom situation.

How can an online course be designed that encourages effective learners and meets the needs of teachers? A number of tertiary courses are already available online in New Zealand (Campbell, 1997; Halliday, 1997; Lai, 1997) which focus on teacher development in education or information technology. Campbell (1997) discusses changes in distance education that have come about as result of the move to using the internet as a learning medium. She highlights the need for such courses to focus on learners, to use the technology to develop effective social groups and to give learners autonomy and control. Lai (1997) uses the familiar environment of the classroom in a campus setting as a metaphor for his course web page design by including terms such as Libraries, Filing Cabinets and Notice Boards. Lai (1999) highlights issues such as interactivity, collaboration and social and interpersonal interaction to be considered when designing learning activities to scaffold and extend student learning. Hirumi and Bermudez (1996) discuss the importance of using strategies that promote interactivity, active learning and the development of learning communities as part of a successful online course. Ensuring that communication is human to human rather than human to computer is also an important point to consider. With these ideas in mind the Graduate Diploma in Education Technology was, and continues to be, developed.

Development of the Graduate Diploma in Education Technology

Phase One: The Print Stage

The course was first presented to students in a traditional print-based folder with learning activities included. Students came into UNITEC for an orientation day and three study blocks in each year. Each study block is of two or three day duration. This face-to-face pattern has remained throughout the development of the programme. To facilitate communication with students and also to provide a model of how the technology could be used for learning, *First Class* was used on a server - client basis. Client software was installed on students' home computers. There were some technical issues related to this. Students needed a relatively high level of technical skill to complete the installation especially if any compatibility issues arose with software already on their computers. Students were encouraged to log on at least twice a week. Two telephone lines at UNITEC were dedicated to this use. Email was one of the most successful functions provided, as 1994 was a time when personal email accounts were rare. Students *First Class* provided an exciting new way for lecturer and students to communicate. Electronic folders were created with information from

education technology bulletin boards. Students were encouraged to post questions and share ideas. A chat facility operated but because only two people could log on at any one time, these were restricted to chats between two people so it was difficult to encourage group work. The course materials and activities continued to be accessed via the print-based folder.

Students were given a floppy disk with all necessary files for each course. These files were also included on the *First Class* server. Learning activities were integrated into the course materials at appropriate places. These included manipulating data on a spreadsheet and database to investigate relationships between ideas or issues to gain an understanding of how cognitive processes in learners could be incrementally increased by the way the teacher formulated questions.

As an example of how learning activities developed along with the programme I will describe one assignment that is the first that students undertake on entering the programme. The assignment requires students to understand the issues of ethics and equity in relation to the use of new technologies in education. In this first phase students investigated these issues in their own organisation and wrote an 800 word report for their Board of Trustees or governing body.

Phase Two: Web-based Learning using HTML

At the end of 1996 it became clear that the internet was going to have a major role to play in education. Developments in web technology were rapid, connections were more reliable and access faster. Many schools were gaining internet access. Because of the nature of the GDipEdTech, it was decided to adapt one course for the web. At this time there was very little collective experience of online learning. Campbell (1997) and Lai (1997), mentioned earlier, were developing their courses at the same time. Consequently the Programme Leader used her skill and knowledge of the learning process, built up over almost thirty years in the primary, secondary and tertiary areas, as a basis for developing educationally sound online learning experiences for teachers.

A creative, supportive and understanding web technician is essential when designing educational learning activities: one who can pick up, and elaborate on educational ideas and understand the nature of the interactivity that the lecturer is proposing. The demands of the learning situation must drive the use of the technology, not the other way round. UNITEC was fortunate in having such a technician. He said "don't ask if something is possible or not, tell me what it is that you want to do and I will figure out a way to do it." He often posed as the 'inarticulate student' and challenged the writer to clarify or justify reasons for wanting something done in a particular way.

The course was written using HTML and perl scripting. Activities that were already built in to the course were adapted for the web. Icons were designed to represent different types of activities. These included computer activities, reflective activities, reading and writing activities as well as ones that required the student to search the web for specific information. Writing and reflecting activities were followed by an online form which the student completed. Questions, in relation to a reading, encouraged higher order thinking or reflection. During the first year, 1997, these entries were emailed to the lecturer and to the student so each had a record of the entries. This enabled the lecturer to monitor progress and give feedback when appropriate, as well as encouraging reflective practice in the teachers. Entries led towards assignments and some activities were reflective in nature. However, students' copies languished in their email boxes and were not easily accessible by them. The following year, 1998, the scripting was altered so that these entries accumulated in a private (to student and lecturer) web page, thereby creating an electronic journal for each student. Entries were still emailed to the lecturer so that they could provide formative feedback. Consequently a record of student progress over the two years was constantly available to them in a easily accessible form. Students responded very positively to this new innovation. They were able to refer to previous entries when writing assignments. One student commented "the course journal allows for easy referral for assignments and makes you use it in order to keep track of your work" (male primary teacher).

A listserv, 'et', was set up for students. Here they shared ideas and resources, discussed issues and asked questions. As well as belonging to the et listserv, teachers were encouraged to join national

BEST COPY AVAILABLE

and international listservs. Local students have always had the opportunity to attend a weekly Drop-In session in the Centre for Educational Multimedia at UNITEC. To cater for students in other parts of New Zealand, weekly virtual Drop-In sessions were held using the chat facility of the instant messaging program, ICQ (I Seek You) (Mirabilis, Online). This was fun as we all experimented with appropriate ways of using it – a prime example of teacher-as-learner! These technologies were all used to create a community of online learners where experiences are shared in a safe environment.

To take advantage of these technologies and the opportunity for easily sharing information, the ethics and equity assignment was changed from students just focusing on their own organisations to also find out how other organisations were addressing these issues and make comparisons. They contacted other students by email or ICQ to share policy documents, discuss strategies and reflect on the situation in their own organisation. This was also the beginnings of establishing a learning community.

During 1997 other courses were developed for the web and at the beginning of 1998 all seven courses were available online and the print-based folder ceased to be sent out. Dreamweaver was used to edit the pages but, because of the complex scripting on some pages it was still highly dependent on the technician. In 1999 UNITEC made the decision to use Blackboard software for all courses. The Programme Leader was very reluctant as it was feared that the interactive nature of the current activities would be compromised. However the use of Blackboard brought many positive surprises.

Phase Three: Blackboard

All seven courses were transferred to *Blackboard 4* over the summer of 1999/2000. The original HTML scripting was kept in place where possible. The scripting on the forms was altered to continue to enable electronic journals for the students. However they did not generate separate web pages but were stored on a different server as individual files. This meant that students retrieved the original entry when they clicked on the Journal button and were able to edit their work. The disadvantage was that these were not accessible to the lecturer who then could not provide formative feedback.

A number of extra features were now available to the Programme Leader. These features include a discussion board, virtual chat rooms, whiteboards, group pages and group tools. Thus external programs such as ICQ and the et listserv were no longer needed as all communication happens within the *Blackboard* software. Assessments were altered to include discussions on various issues and collaborative activities.

The ethics and equity assignment was changed yet again. Although the substance did not change, the mode of learning did. The Discussion Board was used to discuss and share ideas. The power of this new medium quickly became apparent. The depth and detail of student interactions was quite outstanding. Whereas previously they had concentrated a lot on factual and legal aspects of the topics, here they discussed the human and organizational implications from a position of personal experience which was then linked to the literature. Some students reported that change occurred in their organisations as a result of these discussions. It was evident that real transfer of learning had occurred. Discussions are assessed using the criteria of; regularity of contribution, sharing of own ideas, building on others ideas, understanding of the issues demonstrated and reference to the literature.

In the second year, when studying the course, *Teaching and Learning with Telecommunications*, students are asked to undertake a group collaborative assignment and prepare a presentation to their colleagues which examines related issues. Group pages are set up and students use the private areas available to them to plan and prepare their presentation. Tools available are a discussion board, chat, file exchange and email. The Discussion Board and archives of the chat area are

accessible by the lecturer so progress can be monitored and intervention made if necessary. This gives the students confidence that they are on track, or guidance can be given if not, and enables them to move forward. Adult students also sometimes need assistance with collaborative skills and learning strategies. The group presentation is handed in using the Drop Box.

Blackboard 5 would not allow the inclusion of scripting for the journals, but a pop-up Electric Blackboard window appears in the Student Tools area. However this is just one window for a whole course and is not available from the course materials page where the question or activity is. Students are referred to the Electric Blackboard but the lecturer has no way of knowing if this is used or not. Future development could included an Electric Blackboard Button that the lecturer could insert under each activity. Students would then have a pop up Journal for note taking where and when they need it.

The use of the *Blackboard* tools has facilitated the use of authentic learning activities to develop motivated, knowledgeable, strategic, reflective and socially interactive learners. It has also contributed further to the learning community that has evolved with the course. The student web pages, with a photo, means that students can easily contact others who are in similar organisations with similar roles. They not only communicate via email but some have also visited others in their schools. Students are also encouraged to become part of the wider education technology community. Graduates of the programme are used as experts both face-to-face in study blocks and on occasions appear as a guest on the Discussion Board. The confidence that they gain using the web for learning in a safe and secure environment empowers them to become active contributors to the national listserv, *nzcomped*.

Evaluation

When the programme first moved to a web-based environment student evaluations were by way of email. As well as general course evaluation questions, they were asked to comment on the advantages and disadvantages of the online delivery aspect of the programme. Subsequent evaluations are part of the survey facility in *Blackboard*. Students complete these at the end of each course. At the conclusion of their studies students are asked to comment on the programme as a whole and the online learning experiences they have had. The following discussion comes from a combination of all of these forms of evaluation.

Advantages of having the Programme Online

Generally students have responded very positively to the online environment. They like the fact that they can study and access course materials at either their workplace or at home, and also at a time that suits them. This is especially so for students in remote areas who traditionally have not had access to professional development opportunities. The self-paced nature of the course materials and activities are seen as an advantage. Communication via asynchronous technologies, such as email and the discussion board, have been more successful than the synchronous ones of ICQ and Virtual Classroom. Students often find it difficult to 'meet' online at a specific time. As a lecturer it is not easy to find a time that suits the busy lifestyle of all students. However one student noted that, "the use of the listserv and ICQ encourages and involves students in a more collaborative approach to learning" (female secondary teacher). They reported that this collaborative approach to learning was facilitated by the ability to communicate with other students via email, the discussion board and to share files.

Students also commented that they had more personal contact with the lecturer by using email, "help is only an email away". Another advantage of learning online was the increase in their computer skills. They recognized that "nothing makes you learn how to do something like doing it yourself" (female primary teacher).
Students appreciate access to online references such as those within the course materials, the library catalogue, and more recently, the online databases that UNITEC subscribes to. One

student commented, "this approach is good for people who are pretty busy and need access to material quickly".

The views of the students can be summed up with these two quotes; "overall I think this is an excellent way of learning for me and suits well the time I have available and the level I am at." (female primary teacher) and "the information we have access to is relevant and up to date" (female primary teacher).

However, disadvantages and frustrations of learning online were also noted by the students.

Disadvantages and Frustrations of Online Learning

While students noted positively that learning online increased their computer skills they also realized that there was a huge learning curve to be undergone until they felt comfortable and confident with both the technical aspects and the web as a learning environment. The hypermedia aspect of the web made it easy for them to get lost and the fascinating nature of much of the material they found often caused them to lose focus on their primary task. Many commented on the time that learning online took. They had to get used to the new idea of the computer as a source of information and adjusting from paper based material. This highlights the importance of online learning guides and support for students, especially in the early stages of their studies. Students noted that they had to be self motivated and self monitoring. Some found it more difficult to keep a record of what had been done, for example the Journal entries.

While many reported the advantage of communicating with students others found it difficult to establish personal relationships. They acknowledged that often they needed to take the initiative in initiating communication with others.

A few commented on physical disadvantages such as difficulties they had with reading and reflecting on screen. One student, suffering from arthritis, found it difficult working on the keyboard all the time while others lamented their lack of typing skills. Competing with other family members for time on the computer was a disadvantage in a few cases.

Technical issues were often cited as a disadvantage especially if the UNITEC server, or the server of another site was down. Speed of access was another issue, especially for those in more remote areas. Cost of access was also noted as a disadvantage.

Conclusion

The Graduate Diploma in Education Technology has continued to be developed over the course of the last seven years using the latest web technologies and teaching techniques. Student feedback is largely positive about the online learning environment that has been created and the developers endeavour to move swiftly to address any issues identified by students as a barrier to their learning. This could be either a technical issue or one to do with learning activities. Students appreciate the contact with other students who are teachers from the various sectors, primary, secondary and tertiary, and enjoy being able to participate in discussions. The quality and depth of discussion on a range of issues is very rewarding for both students and lecturer. By using these technologies for their own learning, students become confident and competent to try them with their own classes, whether they teach five year olds or adult students. The Programme Leader is continually striving to use the technologies available to create effective online learning experiences.

References

Brody, C., & Davidson, N. (1998). *Professional Development for Cooperative Learning: Issues and Approaches*. Albany: State University of New York press.

Campbell, N. (1997). On-line learning for preservice teachers. *Computers in New Zealand Schools*. 9 (1), 21-24.

Crook, C. (1996). *Computers and the collaborative experience of learning*. London: Routledge.

Halliday, J. (1997). *Graduate Diploma in Education Technology*. UNITEC Institute of Technology [Online]. Available: http://tui.unitechnology.ac.nz [14th September 2001].(password required).

Fullan, M. (1991). *The New Meaning of Educational Change*. (2nd ed.) London: Cassell.

Hirumi, A., & Bermudez, A. (1996). Interactivity, Distance Education, and Instructional Systems Design converge on the Information Superhighway. *Journal of Research on Computing in Education*. *29*(1) 1-16.

Joyce, B., & Showers, B. (1995). *Student achievement Through staff development of School Renewal*. (2nd ed.) New York: Longman.

Lai, K. W. (1997). Web-based Learning: An example of two tertiary education papers offered on the internet. *Computers in New Zealand Schools*. *9*(1), 13-19.

Lai, K. W. (1999). Designing Web-based Learning Environments. In Lai, K.W. (Ed.), *Net-Working: Teaching, Learning & Professional Development with the Internet*. Dunedin NZ: University of Otago Press.

Leithwood, L. (1992) the Principal's Role in Teacher Development. In M. Fullan & A. Hargreaves (Eds.), *Teacher Development and Educational Change*. London: The Falmer Press.

Lock, A. (1996). *The Virtual Campus: Vygotsky*. [Online] Available: http://www.massey.ac.nz/~ALock/virtual/project2.htm [April 2001].

Mirabilis. [Online]. Available: http://www.icq.com [September 2001].

Pallof, R., & Pratt, K. (1999). Building Learning Communities in Cyberspace. San Francisco: Jossey Bass.

St George, A. (1997). *Cognition and Instruction*. Masters paper course notes, Massey University. Palmerston North NZ.

Copyright © 2001 Jackie Halliday.

The author assigns to ASCILITE and educational non-profit institutions a non-exclusive licence to use this document for personal use and in courses of instruction provided that the article is used in full and this copyright statement is reproduced. The author also grants a non-exclusive licence to ASCILITE to publish this document in full on the World Wide Web (prime sites and mirrors) and in printed form within the ASCILITE 2001 conference proceedings. Any other usage is prohibited without the express permission of the author.

BEST COPY AVAILABLE

U.S. Department of Education
Office of Educatonal Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

REPRODUCTION RELEASE
(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title:	ASCILITE 2001 Conference Proceedings		
Authors:	Kennedy, A., Ed.; Keppell, M., Ed.; McNaught, C., Ed.; Petro		
Corporate Source:	Australasian Society for Computers in Learnin	Publication Date:	2001

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options below and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents	The sample sticker shown below will be affixed to all Level 2A documents	The sample sticker shown below will be affix Level 2B documents
PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY HAS BEEN GRANTED BY	PERMISSION TO REPRODUCE AND DISSI THIS MATERIAL IN MICROFICHE ONL BEEN GRANTED BY
SAMPLE	SAMPLE	SAMPLE
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	TO THE EDUCATIONAL RESOURC INFORMATION CENTER (ERIC)
Level 1	**Level 2A**	**Level 2B**
○	◉	○
Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.	Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only.	Check here for Level 2B release, permitting re and dissemination in microfiche only
Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.		

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature: H. Carter	Printed Name/Position/Title: Helen Carter - ASCILITE President
Organization/Address: C/CEDIR University of Wollongong Wollongong NSW 2522 Australia	Telephone: 02-4221-4895 FAX: 02-4225-8312 E-mail Address: info@ascilite.c Date: 05/14/02

EFF-088 (Rev. 2/2001)

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available throughb EDRS.

Publisher/ Distributor:	
Address:	
Price:	

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:	
Address:	

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:	ERIC Clearinghouse on Information & Technology Syracuse University 621 Skytop Road, Suite 160 Syracuse, NY 13244-5290 E-Mail ericft@ericir.syr.edu 315-443-3640 1-800-464-9107 Fax: 315-443-5448

Send Form Clear Form